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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,940	09/25/2003	Sanjay D. Kamat	S. KAMAT 3-5	2055
47394	7590	10/31/2008		
HITT GAINES, PC ALCATEL-LUCENT PO BOX 832570 RICHARDSON, TX 75083			EXAMINER BILGRAMI, ASGHAR H	
			ART UNIT 2443	PAPER NUMBER
			NOTIFICATION DATE 10/31/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@hittgaines.com

### Office Action Summary

**Application No.**

10/670,940

**Applicant(s)**

KAMAT ET AL.

**Examiner**

ASGHAR BILGRAMI

**Art Unit**

2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelavin et al (U.S.6,393,486) and Feldmann (U.S.Pub No. 2002/0021675 A1).
3. As per claims 1, 8 & 15 Pelavin disclosed a border gateway router, comprising: at least three network interfaces (figure 11 shows at least three or more routers R1 through R6); routing table memory that contains a table of active routes ; routing circuitry, coupled to said at least three network interfaces and said routing table memory (col.9, lines 64-67 & col.10, lines 1-32), that routes packets among said at least three network interfaces according to a path vector routing protocol **{BGP is properly classified as a path vector protocol}** based on addresses contained in said at least three network interfaces and said table of active routes; route optimization circuitry, coupled to said routing table memory, that loads said active routes into said routing table memory based on an analysis of router information base (RIB) data (col.23, lines 53-67 & col.24, lines 1-11, RIB is also called routing table); a RIB data receiver, coupled to said route optimization circuitry, that receives RIB data including: an update of an active route to a domain in said network that causes said active route to become a withdrawn route, (col.39,

lines 45-67 & col.40, lines 1-29). Although Pelavin did not explicitly disclose an active route to a domain becoming a withdrawn route on an indication based on loopback address associated with the autonomous system through which the said withdrawn route passed, of a reachability of said each of said nodes, , that disqualifies alternative routes to said domain based on said indications. However Pelavin disclosed that assigning loopback addresses to a router {Autonomous System} is a common technique through which a host can connect to the router; an advantage of a loopback address over the address of a physical port, is that a "loopback cannot fail" (col.36, lines 22-43). In the same filed of endeavor Feldmann disclosed an active route to a domain becoming a withdrawn route on an indication based on loopback address associated with the autonomous system through which the said withdrawn route passed, of a reachability of said each of said nodes and route disqualification logic, associated with said RIB data receiver, that disqualifies alternate routes to said domain based on said indication (paragraph.36). It would have been obvious to one in the ordinary skill in the art at the time the invention was made to have incorporated the loopback address functionality as disclosed by Feldmann in the border gateway router disclosed by Pelvain in order to make the border gateway router more resilient resulting in a more stable and robust router.

4. As per claims 2, 9 & 16 Pelvan-Feldmann disclosed the system as recited in claim 1 wherein said route disqualification logic disqualifies all alternative routes to said domain if all of said nodes are indicated as reachable (Feldmann, paragraph.36).

5. As per claims 3, 4, 10, 19, 11 & 17 Pelvan-Feldmann disclosed the border gateway router as recited in Claim 15 wherein said route disqualification logic disqualifies alternative routes to said domain that pass through unreachable ones of said autonomous systems (Feldmann, paragraph.36).

6. As per claims 5, 12 & 18 the system as recited in Claim 1 wherein said loopback 2 addresses are distinguishable from ordinary network addresses (Feldmann, paragraph.30).

7. As per claims 6, 13 & 19 the system as recited in Claim 5 wherein said loopback 2 addresses are formed in accordance with a Border Gateway Protocol 3 extension (Feldmann, paragraph.36).

8. As per claims 7, 14 & 20 the system as recited in Claim 5 wherein said loopback 2 addresses are assigned canonically (Feldmann, paragraph.24).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Lee U.S. 6,985,959B1 disclosed constraint route dissemination using distributed route exchanges.

11. Teo et al U.S.7,293,077B1 disclosed Reconfigurable Computer networks.

12. Johnson et al U.S. 6,985,963B1 disclosed Sharing IP Network Resources.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASGHAR BILGRAMI whose telephone number is (571)272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia L.M. Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. B./  
Examiner, Art Unit 2443

/Tonia LM Dollinger/  
Supervisory Patent Examiner, Art Unit 2143